

**Presentations to the Board  
June 15, 2010  
Montana Department of Commerce  
Helena, Montana**

**Board Members Attending:** Marty Connell, Chairman  
Jim Davison  
Todd Graetz  
Erik Somerfeld  
Paul Tuss

**Others Attending:** Dave Desch, Executive Director  
Jane Todd, Administrative Specialist

**I. Call to Order and Approve Board Minutes of May 5-6, 2010, Meeting**

Chairman Connell called the meeting to order at 9:10 a.m. Jim Davison moved to approve the minutes of the May 5-6, 2010, Board meeting. Erik Somerfeld seconded the motion. The minutes were approved as presented.

**II. Preparation for Presentations**

Dave Desch stated there are four presentations before the Board today. He discussed the format of this meeting is to hear 15-minute presentations and allow 15 minutes for questions from the Board. By the end of the meeting, the goal is that the Board will have decided on projects that will likely be funded. Final decisions may be made at this meeting or at a phone meeting on June 29th.

**III. Presentations**

The Board heard presentations in the following order. After each presentation, the Board asked the presenter(s) a series of questions.

#11-50 Integration of Passive Seismic, Electrical and Temperature Measurements for Geothermal Resource Exploration Principal Investigator: Leif Cox – Montana Tech of the University of Montana – Butte Funds requested: \$53,760
---

#11-39 Enhanced Oil Recovery in Montana using CO2 from the Clean-Coal Retrofit of a Montana Coal Power Plant for Carbon Capture and Sequestration (CCS) Principal Investigator: Leo Heath – Montana Tech of the University of Montana – Butte Funds Requested: \$318,955 Presenter: John Evans
---

#11-16 Intelligent Proppant (iProppant™) – Activation of Solid State Reaction Mechanisms in Ceramic Proppant Material as a Method to Modify Fracture Path Flow  
Principal Investigator: Hank Rawlins – eProcess Technologies U.S. – Butte  
Funds Requested: \$131,359

#11-17 Development of Ammonia Based Fuels for Environmentally Friendly Power Generation  
Principal Investigator: David Micheletti – Montana Aerospace Development Assn. – Butte  
Funds requested: \$223,858  
Presenters: David Micheletti, Dr.Arif Krabeyoglu, SPG

#### **IV. Discussion**

The Board discussed the presentations and their potential impact on Montana given the limited funding available to the Board and the need to meet the 30% clean coal/renewable resource statutory requirement.

**Action: Paul Tuss made a motion to fund the following projects at the following funding levels:**

#11-01 C5 – C7 Value Added “Montana Specialty Alkanes”	\$190,000
#11-05 Commercialization of Optical Analog Waveform Generation (OAWG) Hardware	\$83,706
#11-11 Second Phase Clinical Trials of a Lypolytic Compound	\$25,000
#11-16 Intelligent Proppant (iProppant™) – Activation of Solid State Reaction Mechanisms in Ceramic Proppant Materials as a Method to Modify Fracture Path Flow	\$50,000
#11-17 Development of Ammonia Based Fuels for Environmentally Friendly Power Generation	\$171,500
#11-22 Enhancement of Applied Research in Biomedicine	\$161,344
#11-24 MEMS-Based MicroZoom Lens for Cell Phone Cameras	\$100,135
#11-26 Continued Development of Applications for Inhibitors of Fungal Morphogenesis	\$100,000
#11-33 Manufacture of Wavefront Guided Progressive Multifocal Contact Lens	\$87,633
#11-37 An Integrated Platform for Cell-Based Drug Discovery	\$99,935
#11-38 Hard White Wheat: Jump-Starting a New Industry for Montana Agriculture	\$70,000/year (2 years)
#11-45 Nanoparticle-Bacteriophage Cocktails to Combat Infectious Disease	\$113,050
#11-50 Integration of Passive Seismic, Electrical and Temperature Measurements for Geothermal Resource Exploration	\$53,760

Jim Davison seconded the motion. There was no further discussion. All in the favor, the motion carried.

#### **IV. Working Lunch (catered)**

Discussion was held regarding the upcoming legislative session and the Board's situation. It was pointed out that the previous legislature extended the sunset of the program to 2019 and, although funding was cut temporarily, funding will revert back to the \$3.65 million level in 2013. It was also suggested that the Board be prepared in the event legislation does surface to which the Board will need to respond. Potential response strategies were discussed.

#### **V. Proposals – Discussion and Funding Decisions**

Further discussion took place regarding funding of proposals. The discussion resulted in an amendment to the above motion.

**Action: Erik Somerfeld moved to amend the previous motion to fund projects as follows:**

#11-01 C5 – C7 Value Added “Montana Specialty Alkanes”	\$190,000
#11-05 Commercialization of Optical Analog Waveform Generation (OAWG) Hardware	\$83,706
#11-11 Second Phase Clinical Trials of a Lypolytic Compound	\$25,000
#11-16 Intelligent Proppant (iProppant™) – Activation of Solid State Reaction Mechanisms in Ceramic Proppant Materials as a Method to Modify Fracture Path Flow	\$50,000
#11-17 Development of Ammonia Based Fuels for Environmentally Friendly Power Generation	\$111,500
#11-21 Neuroprotective Treatment for Traumatic Brain Injury	\$60,000
#11-22 Enhancement of Applied Research in Biomedicine	\$161,344
#11-24 MEMS-Based MicroZoom Lens for Cell Phone Cameras	\$100,135
#11-26 Continued Development of Applications for Inhibitors of Fungal Morphogenesis	\$100,000
#11-33 Manufacture of Wavefront Guided Progressive Multifocal Contact Lens	\$87,633
#11-37 An Integrated Platform for Cell-Based Drug Discovery	\$99,935
#11-38 Hard White Wheat: Jump-Starting a New Industry for Montana Agriculture	\$70,000/year (2 years)
#11-45 Nanoparticle-Bacteriophage Cocktails to Combat Infectious Disease	\$113,050
#11-50 Integration of Passive Seismic, Electrical and Temperature Measurements for Geothermal Resource Exploration	\$53,760

*Presentations to the Board*  
*June 15, 2010*

Paul Tuss seconded the motion. All in favor, the amended motion carried.

## **VI. Public Comment**

There was no public comment.

## **VII. Adjourn**

Dave Desch thanked the Board and acknowledged those members whose terms have expired, or will expire this year (Todd Graetz, Paul Tuss, Marty Connell and Michael Dolson). It is the hope of the Board that those positions will be filled quickly by legislative leadership in order to ensure smooth functioning of the Board.

Todd Graetz moved to adjourn the meeting; Erik Somerfeld seconded the motion. The meeting adjourned at 12:56 p.m.

Respectfully submitted,

---

Martin Connell, Chairman